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AUG 25 1993

Commonwealth of Virginia
Department of Environmental Quality
Waste Division
Attn: Ms. Lisa Ellis, Remedial Project Engineer
Superfund Program
11th Floor, Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Re: Draft Final EE/CA for Soil and Debris Removal Action, Site 1, Camp Allen Landfill, Area B, Naval Base, Norfolk, Virginia

Dear Ms. Ellis:

We are in receipt of your letter dated July 23, 1993 with your comments on the referenced document. Enclosed please find the response to all your comments. The responses to your comments will be addressed in the final EE/CA. The final EE/CA will be forwarded to your office by August 27, 1993.

If you have any questions, please contact Ms. Susan M. Hauser, P.E., at (804) 322-4779.

Sincerely,

N. M. JOHNSON, P.E.
Head, Installation Restoration
Section, North
Environmental Programs Branch
Environmental Quality Division
By direction of the Commander

Enclosure

Copy to (w/ encl):
COMNAVBASE (Code N4, David Forsythe)

Blind copy to (w/ encl):
Admin Record File (Naval Base, Norfolk)
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Response to Department of Environmental Quality's comments (letter dated July 23, 1993) regarding the Draft Final EE/CA for Soil and Debris Removal Action, Site 1, Camp Allen Landfill, Area B, Naval Base, Norfolk, Virginia

Comment 1. On page 2-55 of the EE/CA, it is indicated that samples from three discrete areas of disposal at Area B were obtained, and then these samples were composited and analyzed for TCLP. However, the results in table 2-14 indicate three sets of results, one for each boring. It is not clear what was composited and what was analyzed discretely. As the three areas represent three different types of wastes disposed, each area may contain hot spots, and may be analytically different from the other two areas. Since the areas are discrete, the wastes generated during excavation of each area may be disposed of separately. Compositing these wastes from the three different areas may serve to dilute the contaminants found in any of the individual areas. Therefore, in order to properly characterize the areas, each area should be sampled discretely, and the discrete samples analyzed to determine waste characteristics.

Response: As indicated in Table 2-14 of the Draft Final EE/CA, which lists separate analytical results for each soil boring location, each soil boring was sampled discretely, and the discrete samples analyzed to determine waste characteristics. Wastes from the three locations were not composited together.

Comment 2. On page 2-59, it is stated that actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected under this Removal Action, may present an imminent and substantial endangerment to public health or welfare, or the environment. However, it is not clear how this threat could have been identified as no baseline risk assessment is referenced in the document. What is the total risk to all involved populations? What are carcinogenic and non-carcinogenic risks? What are the risk-based clean up levels?

Response: EPA guidance for conducting EE/CAs does not require the preparation of a Baseline Risk Assessment for a Removal Action. The results of our previous investigations which include numerous rounds of sampling data provided the necessary information to make this decision. The results of this sampling are

presented in the EE/CA. However, there will be the following revisions to Section 2.5, Site Conditions that Justify a Removal, referenced by Comment No. 2, and Section 3.4.1, Chemical Specific ARARs:

a.) The condition of actual or potential exposure to hazardous substances as justification for the removal action will be deleted from Section 2.5. After a review of the information it was determined that the threat is to the groundwater and not from contact with surface soil. Therefore the EE/CA will be changed to indicate that the removal action will be based on the condition of (actual or) potential contamination of groundwater or sensitive ecosystems from VOC contamination due to the debris buried at Area B.

b.) Section 3.4.1 of the Draft EE/CA provided risk-based soil cleanup goals calculated for the site based on direct contact with the soil by future residential children. As noted above, the Final EE/CA will be revised to reflect groundwater protection from VOC contamination as the basis for the removal action. Therefore, the list of indicator contaminants in the Final EE/CA will be reduced to include only the volatile organic chemicals of concern, namely, trichloroethene, 1,2-dichloroethene, and vinyl chloride, and cleanup goals will be calculated for the site based on protection of non-potable groundwater.

Comment 3. The removal action, as described on page 3-3, includes treatment of extracted groundwater to Federal Ambient Water Quality Criteria and Virginia Surface Water Standards and discharge to surface. The EE/CA should also make reference to the VPDES discharge permit which would be required for such a discharge. I have spoken with Dave Grimes of the Water Division's Office of Environmental Research and Standards, and Mr. Grimes agreed that a permit would be required prior to any such discharge taking place. However, according to your telefax of 7/21/93, you are no longer intending to discharge in the manner described in the EE/CA. Rather, the excavation-related groundwater will be treated and discharged to the Hampton Roads Sanitation District. The EE/CA must be changed to reflect this.

Response: The EE/CA has been revised to reflect the proposed plan to discharge treated groundwater to the sanitary sewer system of the Hampton Roads Sanitation District. Additionally, the Federal Ambient Water Quality Criteria and the Virginia Surface Water Standards will be deleted from the EE/CA as ARARs since there will no longer be a discharge to surface waters.

Comment 4. On page 3-4, it is stated that the Department of the Navy, which is the lead organization for this site, has determined the ARARs for this removal action. As you know, in accordance with the Defense State Memorandum of Agreement, it is the Department of Environmental Quality's (formerly Department of Waste Management) role to provide State ARARs. The Navy is only responsible for Federal ARARs.

Response: We agree that this statement is true. We will revise the text to clearly state this.

Comment 5. On page 3-5, it is stated that "contaminant levels provided below have been developed to assure removal of all contaminated soil to levels which do not pose a health risk due to direct contact with the soil by (future) residential children." However, on page 3-6, the cleanup goal provided for PCBs is not residential, it is an industrial level. The EPA recommended soil level for PCBs in land for residential use is 1 mg/kg (ppm). We recommend that a site-specific risk assessment be performed to establish site-specific cleanup levels for PCBs at this location. Presently, the Department of Environmental Quality-Waste Division is using the EPA Region III Risk-Based Concentration (RBC) Table, Second Quarter 1993, as interim guidance for determining appropriate cleanup standards for environmental contaminants. The suggested risk-based concentration for PCBs in residential soil in the RBC table is 0.16 mg/kg (ppm); and 0.37 for commercial/industrial soil. Alternatives to these numbers may be taken into consideration by the DEQ if a site-specific risk assessment indicates it is appropriate to do so.

Response: The statement "which do not pose a health risk due to direct contact with the soil by (future) residential children" is incorrect. The site is industrial in nature and the scenario for residential use will not

be used as a basis for the removal action. The PCB cleanup level at 10 ppm is directly from EPA guidance for PCB cleanup at industrial sites. The PCB level was included in the cleanup levels only as a precaution since the surface soil sampling indicated the highest PCB level as 0.78 ppm. The subsurface samples at the same locations only yielded one hit of PCBs at 9.5 ppm. These results do not warrant a cleanup for PCBs. Additionally, the guidance you reference has a cover letter with it that specifically states "The table has no official status as either regulation or guidance, and should be used only as a predictor of generic single contaminant health risk estimates."

It should be noted that a Draft Final Baseline Risk Assessment has been completed as part of the RI/FS for the Camp Allen Landfill, which indicates insufficient risk due to direct contact with surface and subsurface soil under present conditions and exposure scenarios to justify a removal action. However this report has not been released to the public and we should not reference it in the EE/CA. (Note: This report will be forwarded to VDEQ within two weeks to proceed with the RI/FS review for the entire Camp Allen Landfill Site.) To answer the question relating to the EE/CA, it is the Navy's position that the removal action will be based on groundwater protection from VOC contamination, and risk-based cleanup goals will be calculated for the VOCs of concern at the site. These revisions will be made to the Final EE/CA.

Comment 6. On page 3-6, the cleanup goal for tetrachloroethane in soil is listed as 40.0 mg/kg; the RBC Table lists the risk-based cleanup goal for this chemical of concern as 23 mg/kg for residential soil.

Response: See response to comment number 5. The cleanup goal for tetrachloroethane will be deleted from the Final EE/CA because it is not a chemical of concern for the shallow groundwater, and the removal action will be based on protection of groundwater.

Comment 7. On page 3-6, the Commonwealth of Virginia administers an EPA authorized state RCRA program, under the authority granted in the Virginia Waste Management Act, Code of Virginia Sections 10.1-1400 et seq. The Virginia Hazardous Waste Management Regulations (VHWMR) (VR672-10-1), will serve as the governing

ARAR in place of the RCRA regulations contained in 40 CFR Part 261. The criteria for identifying the characteristics of hazardous waste and for listed wastes are provided in Part III of these regulations.

Response: The Final EE/CA will be revised to identify the Virginia Hazardous Waste Management Regulations which pertain to the removal action as the governing ARAR in place of the RCRA regulations contained in 40 CFR 261.

Comment 8. On pages 3-6 and 3-7, the reference to Total Toxic Organics in 40 CFR Part 433.11 (e) refers to Part 433. These are specialized definitions for Metal Finishing. The reference to this regulation in regards to the discharge of chemicals of concern to the Hampton Roads Sanitation District POTW seems inappropriate. Could you please clarify why this section is used to define an effluent discharge limit? Will the HRSD actually be testing for all of the chemicals on this list, or will they test for the individual chemicals of concern that are expected to appear in the waste stream from the Camp Allen landfill? There is also some concern regarding the discharge limits as reported. For example, the Virginia Water Quality Standards for DDT are 0.001 ug/L for the protection of aquatic life (chronic). A discharge limit of 1.0 mg/L is six orders of magnitude greater than the Virginia Water Quality Standard. At this level, will it be possible for the HRSD to meet the revised Virginia Water Quality Standard? The Virginia Water Quality Standards for benzene, lead, chromium and zinc, are also much lower than the 1.0 mg/L discharge limit tentatively set by the HRSD.

Response:

a. This section is not used to define an effluent discharge limit. The regulation stated is used because it contains the definition of the term Total Toxic Organics and how it is calculated. The effluent limit was then specified by HRSD using this definition.

b. HRSD will not be testing the waste stream from this removal action. The Navy will be testing the waste stream and providing the documentation to HRSD that the Navy has not exceeded the limits dictated by HRSD.

Response to comments (cont'd)

c. The Virginia Water Quality Standard is not an ARAR for this site. The Navy is not discharging to surface water. The Navy is required to meet the effluent limits requested by HRSD in accordance with the Clean Water Act "Indirect Discharge Requirements", Commonwealth of Virginia Permit Regulations (VR680-14-01, Section 7) and HRSD Industrial Wastewater Discharge Regulations (Part III and Appendix D). The Navy will meet the limits set by HRSD and will therefore be in compliance with the ARARs for water discharge.

Comment 9. On pages 3-6 and 3-7, the list of contaminants in the previous two sections that you are deleting contained a reference to barium; this is missing in the new list of contaminants in the revision. The new list of contaminants includes acetone, which was not included in the previous lists of contaminants. Please check on the discrepancies in the list of Chemicals of Concern.

Response: A discharge limit of 2.0 mg/l of barium will be listed in the Final EE/CA. Acetone, which is not a contaminant of concern at the site, will remain listed at the request of Hampton Roads Sanitation District.

Comment 10. On Page 3-8, with reference to location-specific ARARs, actions taken that impact a man-made wetland may be subject to the same requirements as activities in a natural wetland. If the man-made wetland that you are referring to is a tidal wetland, and contiguous to tidal waters, or a natural tidal wetland, any activities that impact this wetland will have to be reviewed by the Virginia Marine Resources Commission and the Norfolk Wetlands Board. If the man-made wetland was created for compensation, or stormwater management, any impacts upon this wetland would require a permit. Please provide additional background information on the man-made wetland, the reason for its creation, and any expected, or potential impacts.

Response: The wetland is not a tidal wetland, not contiguous to tidal waters and not a natural tidal wetland. The wetland area described is in a man-made pond and along a drainage ditch. The wetlands area was not created for any purpose (i.e. compensation, etc). However, the final EE/CA will be revised to delete all references to wetlands regulations as ARARs

because, at this time, the Navy does not expect to impact these wetlands and they do not appear to be regulated wetlands.

Comment 11. On page 3-9, in reference to the information contained under the Endangered Species Act, the National Historic Preservation Act, and the Coastal Zone Management Act, it is stated that the appropriate state agencies would be contacted in the future to determine requirements related to threatened or endangered species, historic landmarks/places at the site, and coastal zone management. Under the DSMOA, and as part of the Commonwealth's role in identifying state ARARs, we would normally provide this as a service to you. If you have already contacted these agencies, in order to prevent a duplication of effort, please provide us with a copy of their determinations. If you have not yet contacted these agencies, please let us know and we will serve as the point of contact for you.

Response:

a. LANTDIV has provided the State Historic Preservation Officer (SHPO) with information regarding all of Naval Base Norfolk in the past. The SHPO was contacted by LANTDIV and a description of this site and proposed action provided. The SHPO has determined that the removal action would not be classified as an "undertaking" by their office. Therefore, the site does not need any further study or clearance with regard to the Historic Preservation Act.

b. LANTDIV requests that the Commonwealth verify the requirements of the Endangered Species Act and the Coastal Zone Management Act as possible State ARARs. Please forward these remaining ARARs as soon as possible.

Comment 12. In addition to the location-specific ARARs that are provided in the document, in Virginia, any activity located in a floodplain must comply with the provisions of local land use ordinances. Floodplains may be subject to the Chesapeake Bay Preservation Area Designation and Management Regulations (CBPA Regulations) (VR 173-02-01) as Resource Management Areas (RMAs). The inclusion of the floodplain in a Resource Management Area would depend on the potential for water quality degradation to the adjacent Resource protection Area.

Response to comments (cont'd)

Response: It has been determined through FEMA that the Camp Allen Landfill is not located in a floodplain.

Comment 13. On page 3-10, Action-specific ARARs, as stated previously, the Commonwealth of Virginia administers an authorized state RCRA program. The Virginia Hazardous Waste Management Regulations (VHWMR) (VR 672-10-1), will serve as the governing ARAR in place of the RCRA regulations contained in the 40 CFR Parts, except for the Land Disposal Restrictions of 40 CFR Part 268.

Response: See Response to Comment No. 7.

Comment 14. The following Action-specific State ARARs are provided for your information:

I. Excavation/Offsite Disposal of Soils

Virginia Waste Management Act, Code of Virginia Sections 10.1-1400 et seq.; Virginia Hazardous Waste Management Regulations (VHWMR) (VR 672-10-1); Virginia Solid Waste Management Regulations (VSWMR) (VR 672-20-10). Federal: the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901, and the applicable regulations contained in Title 40 of the Code of Federal Regulations; and the U.S. Department of Transportation Rules for Transportation of Hazardous Materials, 49 CFR Parts 107, 171.1-172.558.

a. If the remedial response contemplated involves storage, treatment or disposal of a VHWMR/RCRA hazardous waste, various VHWMR/RCRA requirements may need to be complied with as specified in VHWMR and/or the applicable 40 CFR Parts. Because Virginia administers an authorized state RCRA program, the Virginia Hazardous Waste Management Regulations (VHWMR) will serve as the governing ARAR in place of the RCRA regulations contained in the 40 CFR Parts, except for the Land Disposal Restrictions of 40 CFR Part 268.

Some sample VHWMR Part X Sections corresponding to RCRA regulations of 40 CFR Part 264 are listed below:

	VHWMR §	40 CFR Part 264
Releases from Solid Waste Management Units	10.5	Subpart F
Closure and Post-Closure	10.6	Subpart G
Use and Management of Containers	10.8	Subpart I
Tank Systems	10.9	Subpart J
Surface Impoundments	10.10	Subpart N
Waste Piles	10.11	Subpart L
Land Treatment	10.12	Subpart M
Landfills	10.13	Subpart N

b. The transportation of hazardous waste must be conducted in compliance with VHWMR (VR 672-10-1) Part V (Manifest Regulations for Hazardous Waste Management), and Part VII (Regulations Applicable to Transporters of Hazardous Waste), VHWMR (VR 672-30-1) Regulations Governing the Transportation of Hazardous Materials, and 49 CFR Parts 107, 171.1-172.558.

c. The deposits of any soil, debris, sludge or any other solid waste from a site must be done in compliance with VSWMR (VR 672-20-10), Contaminated material from the site that is not classified as hazardous may be classified as a special waste under Part VIII of VSWMR. Specific authorization from VDWM is required before a landfill operator in Virginia can accept special wastes.

II. Incineration of Soils/Sediment

a. Incineration of soils/sediment must comply with VHWMR (VR 672-10-1) Part X § 10.14 Incinerator Standards for Permitted Hazardous Waste Management Facilities.

b. The requirements for the disposal of incinerator ash will depend on whether the ash is classified as a hazardous waste. If not a hazardous waste, the ash may be classified as a special waste under VSWMR VIII.

III. Capping of Soils

a. VHWMR (VR 672-10-1) Part X § 10.13 Landfill Standards, and Part X § 10.6 Closure and Post-Closure Standards.

IV. Excavation/Onsite Treatment of Soils/Sediment

a. VHWMR (VR 672-10-1) Part X § 10.8 Use and Management of Containers, § 10.9 Tank Systems, and § 10.13 Landfill Standards.

b. The Virginia Water Protection Permit Regulations (VR 680-15-02) delineate the procedures and requirements to be followed in connection with activities such as dredging, filling or discharging any pollutant into, or adjacent to, surface waters, or any activity which impacts the physical, chemical or biological properties of surface waters. (The definition of surface waters includes wetlands.) The permit is typically required in addition to the U.S. Army Corps of Engineers § 404 permit, and is issued in coordination with local permitting boards or the Virginia Marine Resources Commission.

V. Groundwater and Wastewater Collection and Treatment

a. If treated water is to be discharged to surface waters, it must meet the VSWCB's effluent discharge limits established by the Virginia State Water Control Board in accordance with the Virginia Pollution Discharge Elimination System (VPDES) Regulations (VR 680-14-01). These limits are established on a case-by-case basis. Site-specific limits may be established following receipt of initial design and estimated discharge rates of the treatment unit.

b. The Virginia Water Protection Permit Regulations (VR 680-15-02) delineate the procedures and requirements to be followed in connection with activities such as dredging, filling or discharging any pollutant into, or adjacent to, surface waters, or any activity which impacts the physical, chemical or biological properties of surface waters. (The definition of surface waters includes wetlands.) The permit is typically required in addition to the U.S. Army Corps of Engineers § 404 permit, and is issued in coordination with local permitting boards or the Virginia Marine Resources Commission under the permitting requirements of the Chesapeake Bay Preservation Act (Code of Virginia § 10.1-2100 et seq.) Chesapeake Bay Preservation Area Designation and Management Regulations (CBPA Regulations) (VR 173-02-01).

VI. Land Disturbing Activities

a. The Virginia Stormwater Management Act, § 10.1-603.1 et seq.; Virginia Stormwater Management Regulations (VR 215-02-00), the Virginia Erosion and Sediment Control Law, Code of Virginia § §10.1-560 et seq., the Virginia Erosion and Sediment Control Regulations (VR 625-02-00), as well as local stormwater management and sediment and erosion control programs administered by the County Design plans concerning these activities will be submitted by the DEQ-Waste Division to the locality for review before any land-disturbing activity.

Response: I. Excavation/Offsite Disposal of Soils

LANTDIV believes the broad list of Action-specific ARARs provided by the Commonwealth of Virginia should be narrowed to reflect only those regulations pertinent to the excavation, transportation and offsite disposal of soils. As reported in Section 2.4 of the Draft EE/CA, disposal characterization borings analyzed for full TCLP and RCRA characteristics determined that the representative soil samples from the Area B source areas were not characteristic hazardous wastes. However, to provide

additional environmental and worker protection during the removal action, on-site activity will be conducted in accordance with Virginia Hazardous Waste Management Regulations (VR 672-10-1).

Although the soil is not classified as hazardous, in order to provide additional protection at the disposal facility, LANTDIV proposes to dispose the excavated soil and debris at a RCRA-permitted hazardous waste landfill operated in accordance with the RCRA regulations contained in 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities, and the authorized state RCRA program where the disposal facility is located. The Remedial Action Contractor will submit as part of his Work Plan the location of the proposed disposal facility. Transportation of soil and debris will be conducted in accordance with Virginia Hazardous Waste Management Regulations (VR 672-10-1) Part V (Manifest Regulations for Hazardous Waste Management), and Part VII (Regulations Applicable to Transporters of Hazardous Waste), VHWMR (VR 672-30-1) Regulations Governing the Transportation of Hazardous Materials, and 49 CFR Parts 107, 171.1-172.558.

Construction rubble which is not classified as contaminated may be classified as a special waste under Part VII of VSWMR (VR 672-20-10). The Remedial Action Contractor will obtain authorization from VDWM prior to disposal at a landfill permitted to receive special waste.

II. Incineration of Soils

Incineration of soils was retained as a removal alternative but is not the Navy's Proposed Disposal Alternative. For the purposes of evaluating this alternative, VHWMR (VR 672-10-1) Part X Section 10.13 Incinerator Standards for Permitted Hazardous Waste Management Facilities, will be listed as an Action-specific ARAR.

III. Capping of Soils

Capping of soils has not been retained as an alternative for this removal action. Therefore, VHWMR (VR 672-10-1) Part X Section 10.8 Landfill Standards, and Part X Section 10.6 Closure and Post-

Closure Standards, as they apply to capping of soils, do not apply to this removal action.

IV. Excavation/Onsite Treatment of Soils

Onsite treatment of soils has not been retained as an alternative for this removal action. VHWMR (VR 672-10-1) Part X Section 10.8 Use and Management of Containers, Section 10.9 Tank Systems, and Section 10.13 Landfill Standards, as they apply to onsite treatment of soils, do not apply to this removal action.

V. Groundwater and Wastewater Collection and Treatment

Groundwater collected as part of dewatering operations will be treated and discharged to the sanitary sewer system of the Hampton Roads Sanitation District (HRSD). As such, this discharge will be regulated by the Clean Water Act "Indirect Discharge Requirements" (40 CFR 403); the Commonwealth of Virginia Permit Regulations (VR 680-14-01, Section 7); and local HRSD Industrial Wastewater Discharge Regulations (Part III and Appendix D). Therefore, number V does not apply to this removal action.

VI. Land Disturbing Activities

The Final EE/CA will include all the Action-specific State ARARs pertaining to stormwater management and erosion and sediment control provided by Virginia.

Comment 15. On page 4-4, it is stated that on-site thermal treatment via a mobile incinerator [may be an applicable removal alternative]. This activity may require permitting under the DEQ Air Division for emissions, under the Solid Waste Management Regulations for treatment of solid waste, or under the Virginia Hazardous Waste Management Regulations and RCRA for treatment of hazardous waste (if applicable). Once again, permits at non-NPL installations are required for these types of activities. Please note that in many instances, the mobile incinerator operator has already obtained permits for conducting these activities. If this is the case, the installation would not be required to

duplicate any permit which has already been obtained. However, we would need to know the permit information (i.e., permit number, date, etc.) from the operator.

Response: Onsite thermal treatment has not been retained as an alternative for this removal action.

Comment 16. On page 5.2, a verbal description of the removal action is provided. However, a schematic diagram of the groundwater treatment system indicating discharge points would be very helpful.

Response: A schematic diagram of the groundwater treatment system indicating discharge points will be added to the Final EE/CA.